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(54) **PERIPHERAL TREATMENT FOR HEAD-MOUNTED DISPLAYS**

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G02B 27/00 (2006.01)
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(52) **U.S. Cl.**
CPC ***G02B 27/0172*** (2013.01); *G02B 2027/0112* (2013.01); *G02B 2027/0123* (2013.01); *G02B 2027/0161* (2013.01)

(58) **Field of Classification Search**
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See application file for complete search history.

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(57) **ABSTRACT**

Methods and apparatus, including computer program products, implementing and using techniques for projecting a source image in a head-mounted display apparatus for a user. A first display projects an image viewable by a first eye of the user. A first peripheral light element is positioned to emit light of one or more colors in close proximity to the periphery of the first display. A receives data representing a source image, processes the data representing the source image to generate a first image for the first display and to generate a first set of peripheral conditioning signals for the first peripheral light element, directs the first image to the first display, and directs the first set of peripheral conditioning signals to the first peripheral light element. As a result, an enhanced viewing experience is created for the user.

27 Claims, 7 Drawing Sheets